



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

March 28, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:12 Reporting for the week ending 03/22/14 (MMWR Week #12)

CURRENT HOMELAND SECURITY THREAT LEVELS

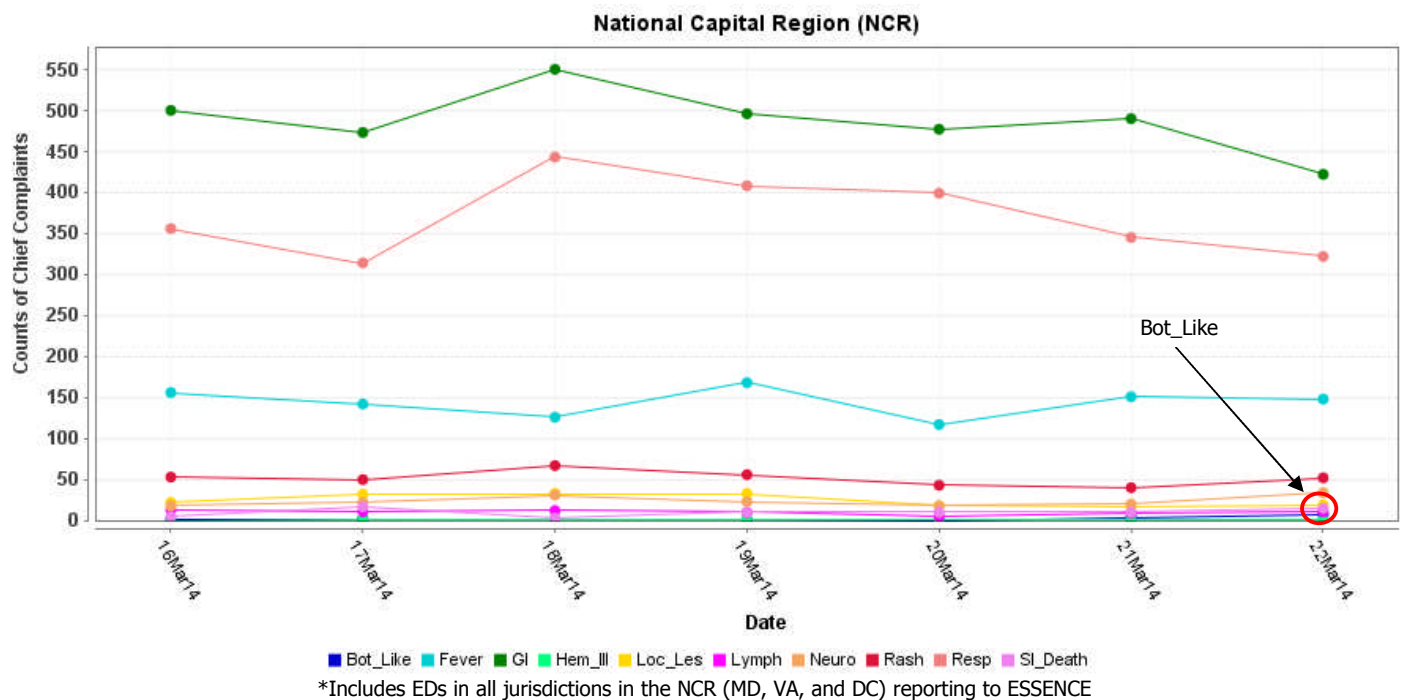
National: No Active Alerts
Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

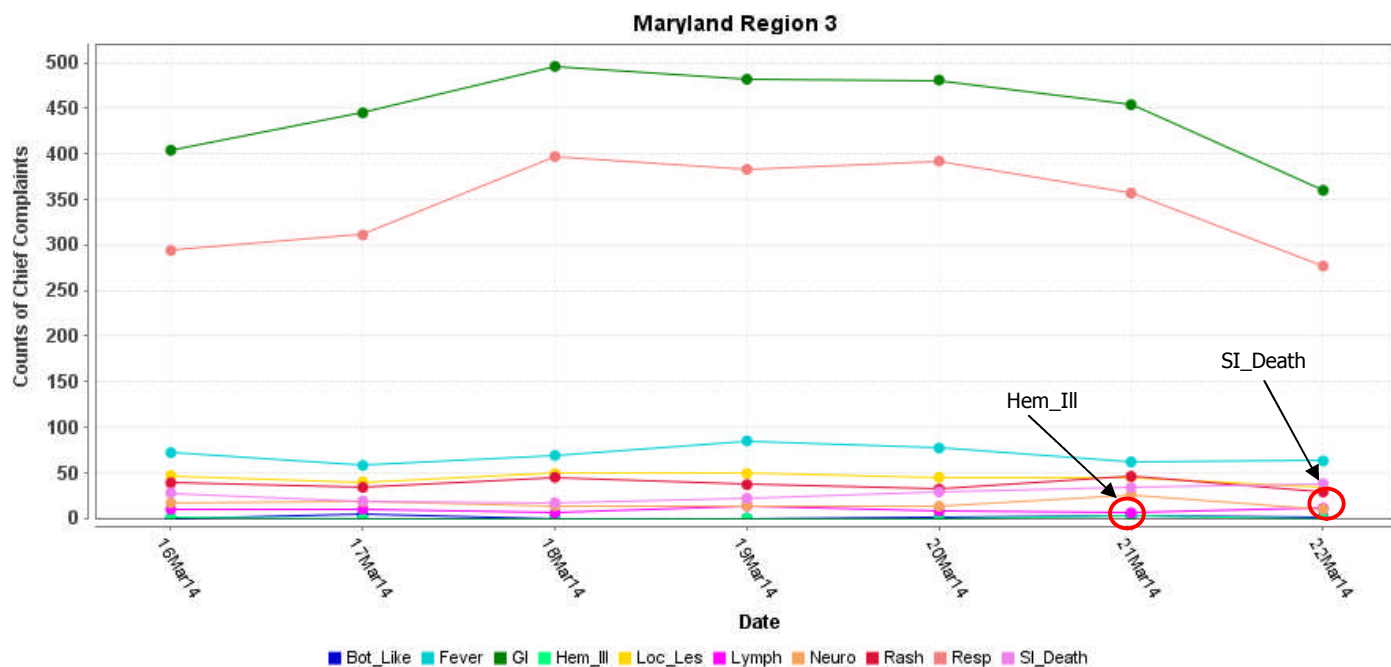
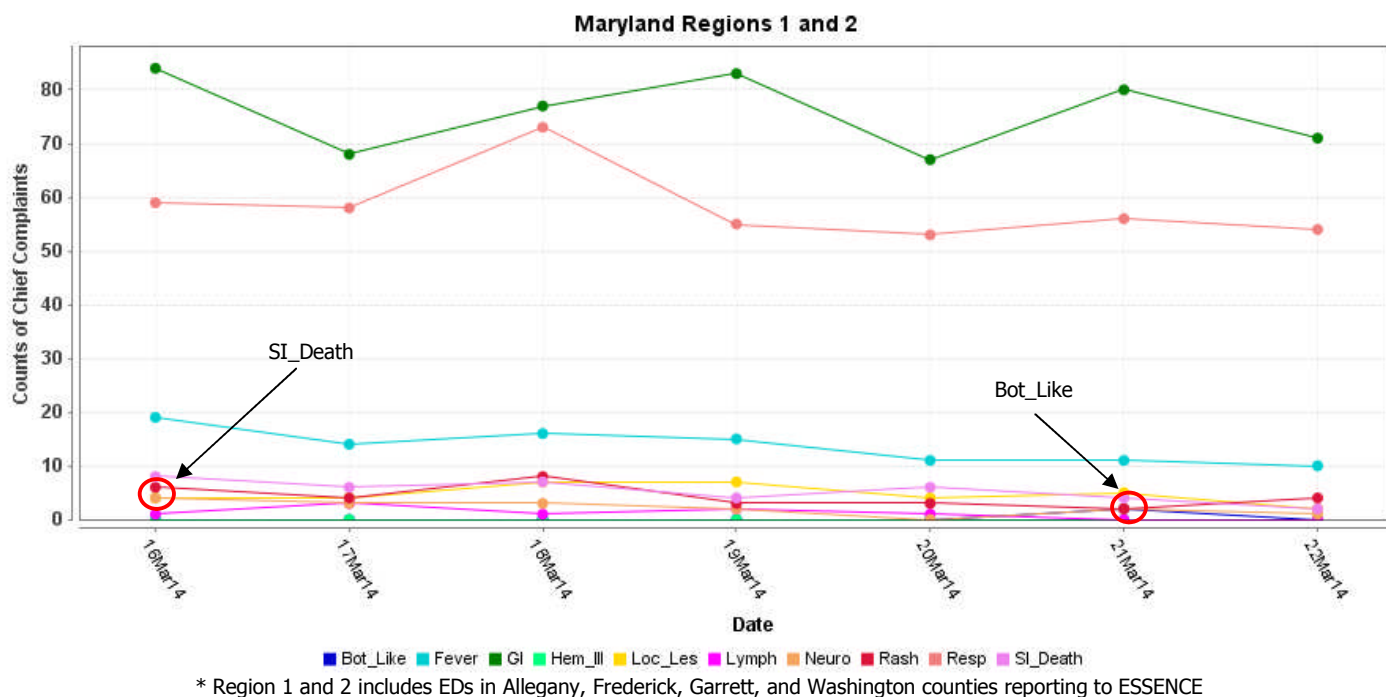
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

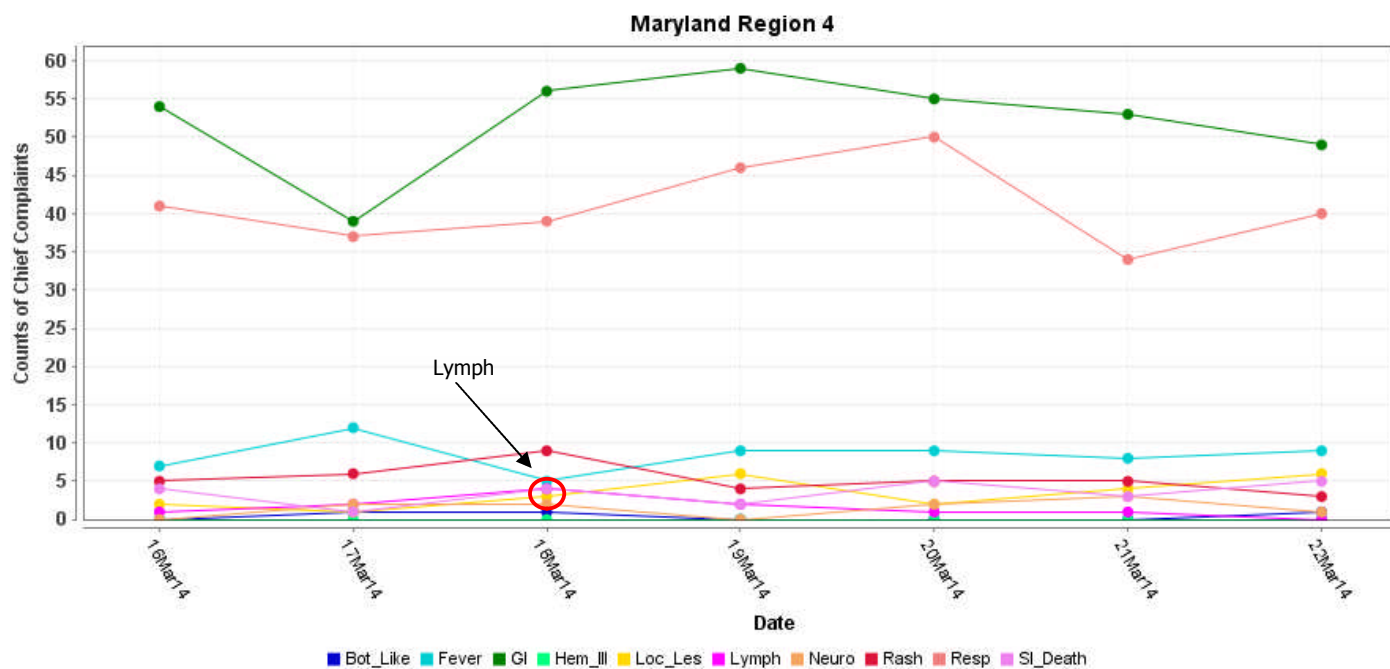
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

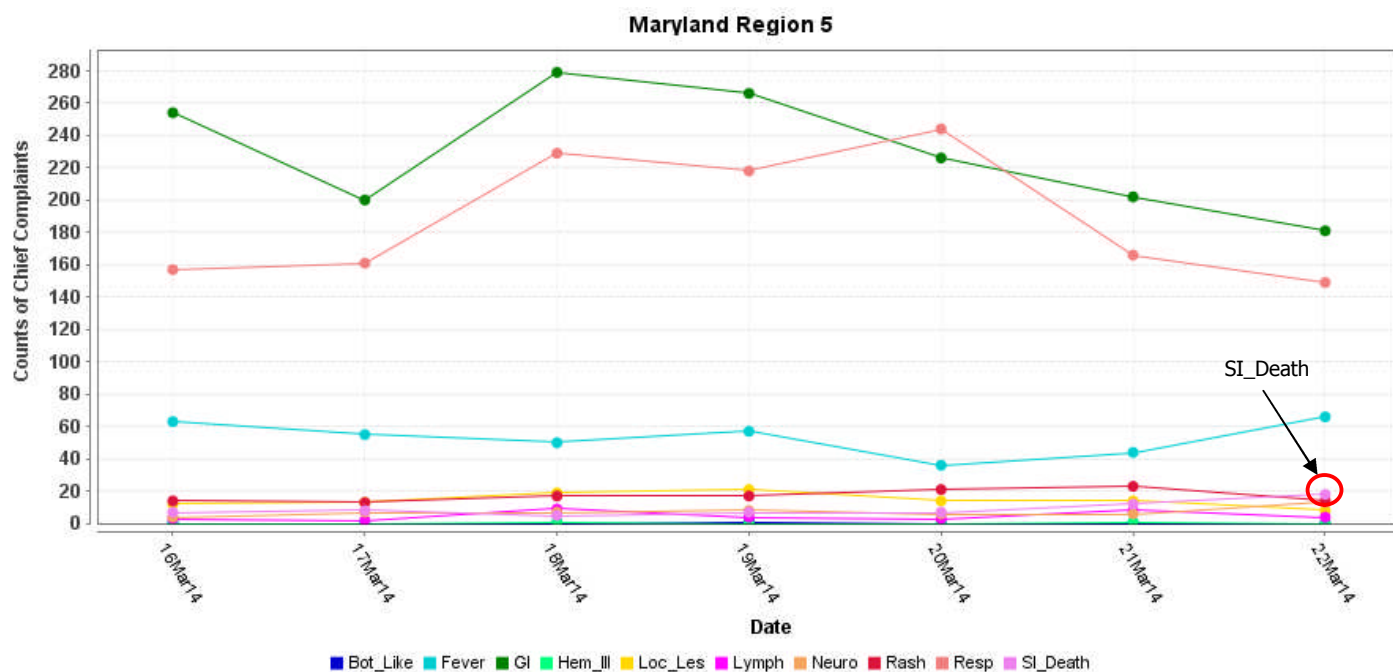


MARYLAND ESSENCE:





* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

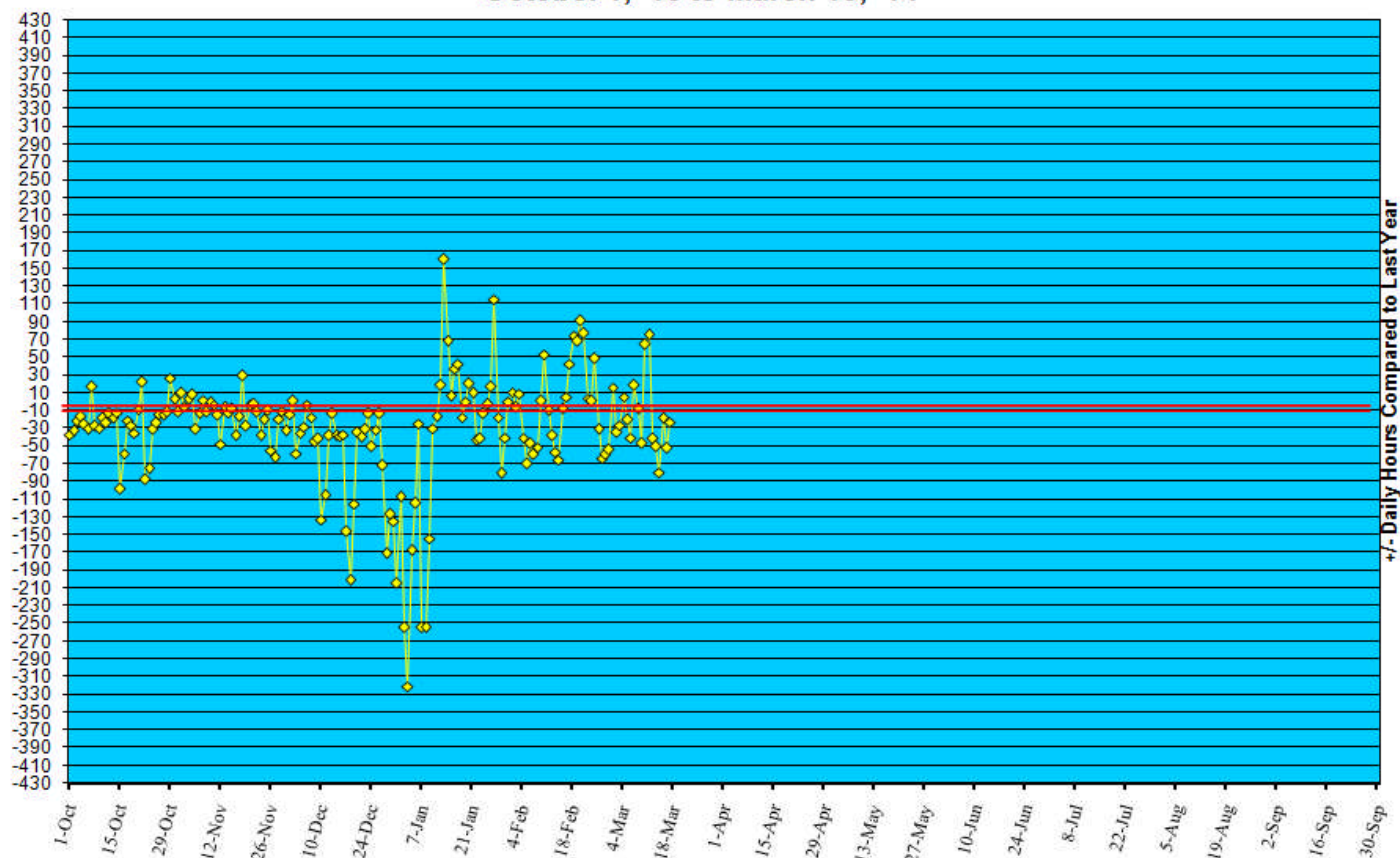


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '13 to March 15, '14



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (March 16 - March 22, 2014):	2	0
Prior week (March 9 - March 15, 2014):	4	0
Week#12, 2013 (March 17 - March 23, 2014):	6	0

7 outbreaks were reported to DHMH during MMWR Week 12 (March 16-22, 2014)

6 Gastroenteritis Outbreaks

4 outbreaks of GASTROENTERITIS in Nursing Homes
1 outbreak of GASTROENTERITIS in an Assisted Living Facility
1 outbreak of GASTROENTERITIS associated with a Daycare Center

1 Respiratory Illness Outbreak

1 outbreak of INFLUENZA in a Nursing Home

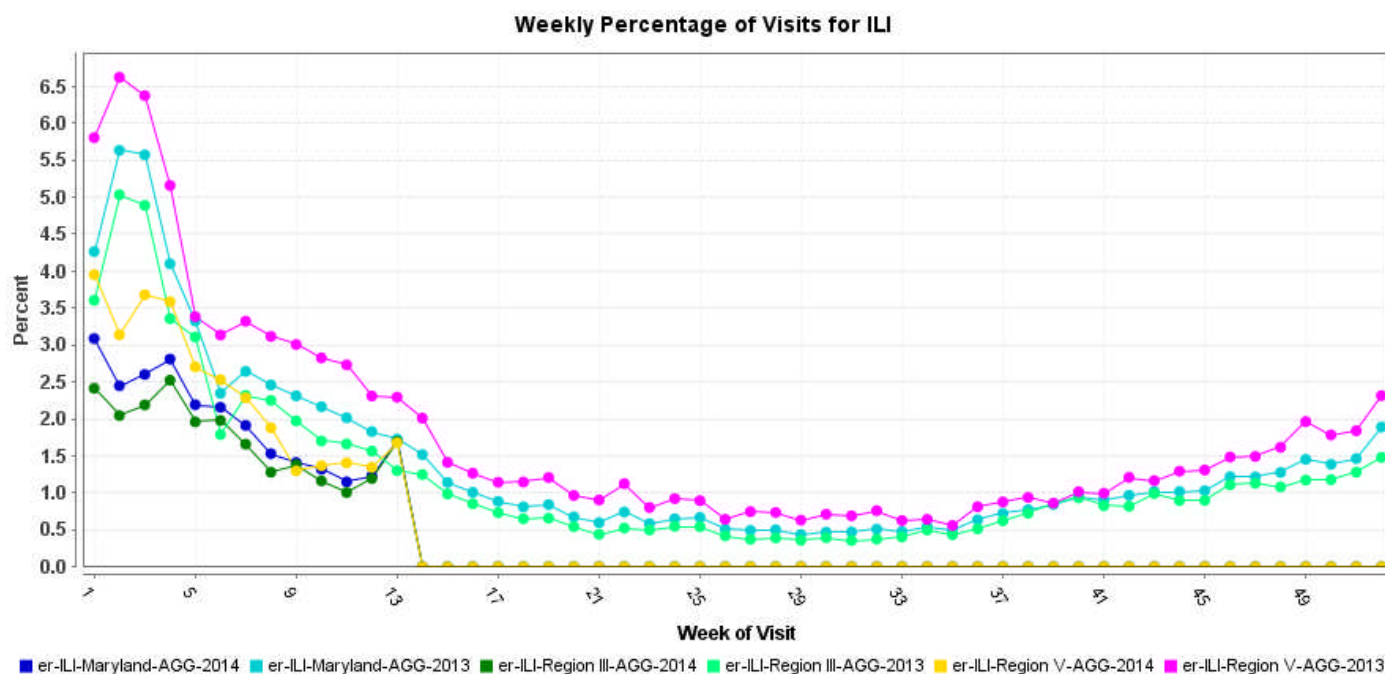
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 12 was: Local with Minimal Intensity.

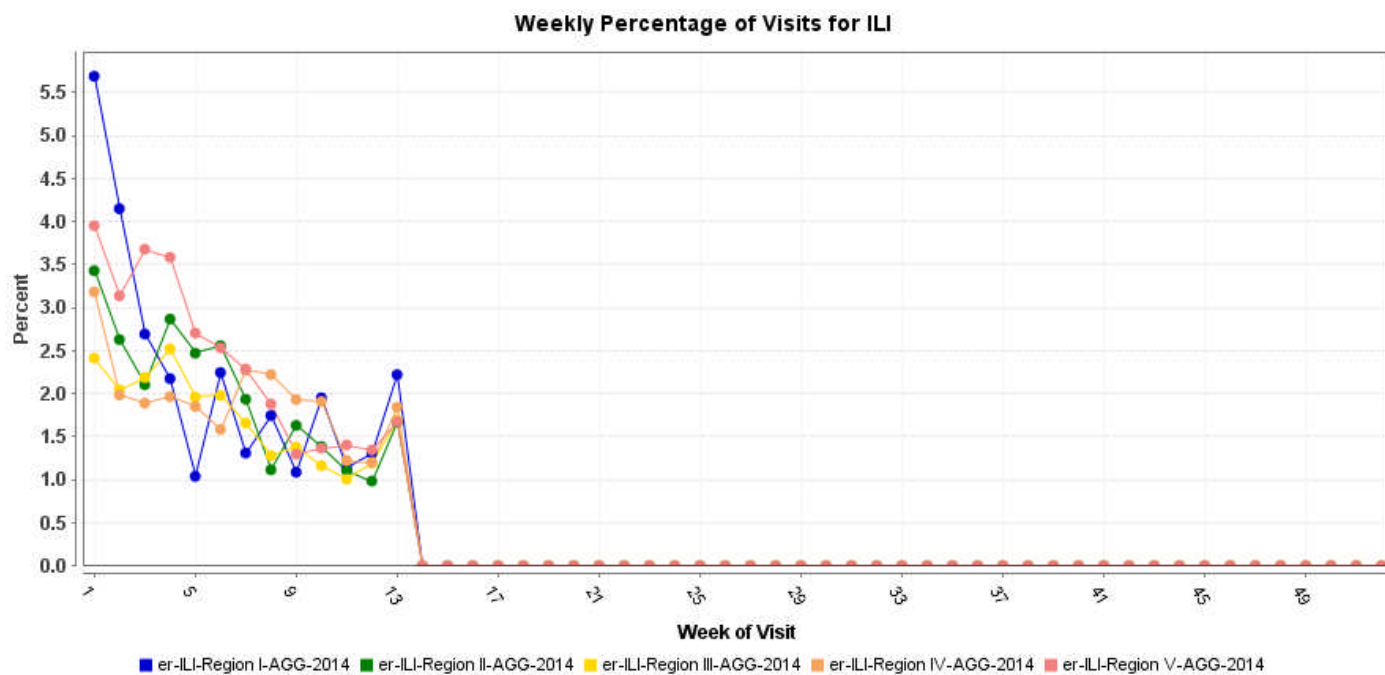
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



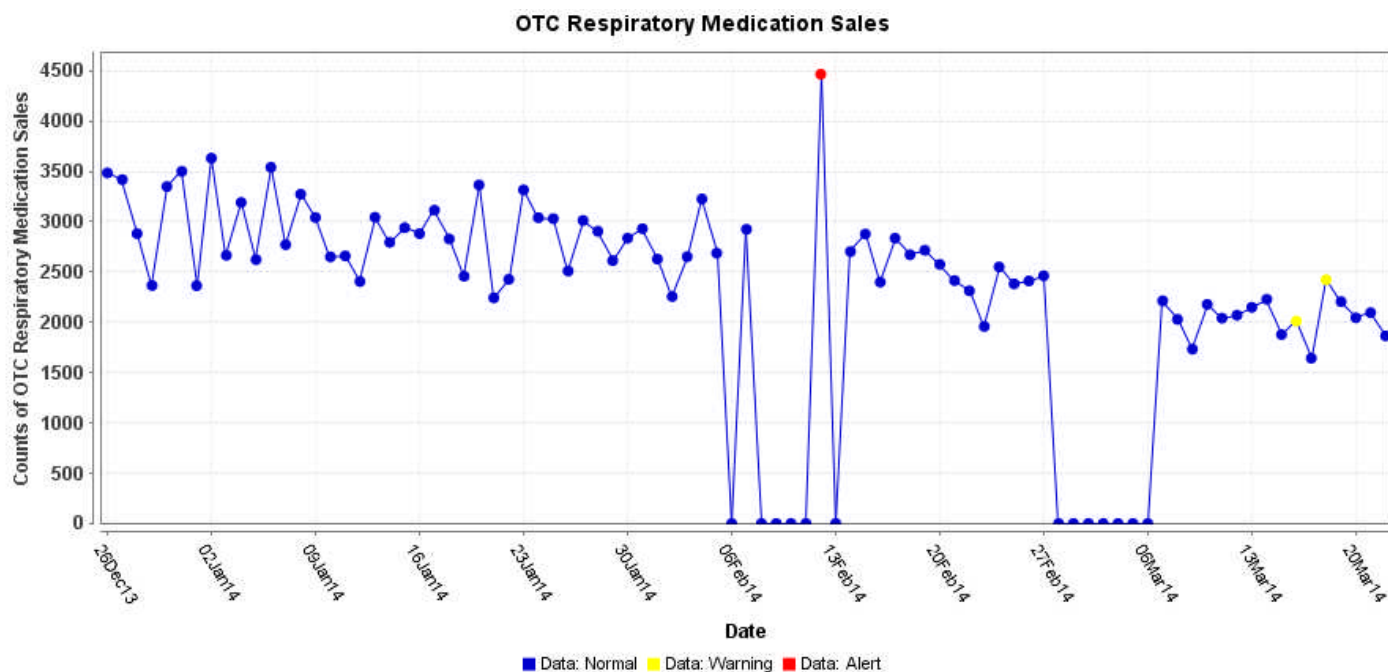
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (H5N1): According to a report in the Egypt Independent today, 2 people, an adult woman and a child, have tested positive for H5N1 avian influenza. According to the report by Al-Masry Al-Youm [newspaper], "A 56-year-old woman in Beheira's Damanhour, and a 4-year-old child in Damietta, who are in critical condition, have been transferred to ICU and administered Tamiflu treatment." These 2 patients are the 1st bird flu cases to be discovered since April 2013." There is no notice of the infections on the Egyptian Health Ministry website as of this publication. As Avian Flu Diary blogger, Mike Coston noted in a post Friday [21 Mar 2014] concerning the precipitous drop in cases in Egypt in recent years: "After reporting the most human infections with the H5N1 virus for 4 years running (2009=39, 2010=29, 2011=39, 2012=11), the reported number of cases out of Egypt plummeted last year (2013) to only 4." According to the WHO, the primary risk factor for human infection with the virus appears to be direct or indirect exposure to infected live or dead poultry or contaminated environments. They go on to say there is no evidence to suggest that the H5N1 virus can be transmitted to humans through properly prepared poultry or eggs. A few human cases have been linked to consumption of dishes made of raw, contaminated poultry blood. However, slaughter, defeathering, handling carcasses of infected poultry, and preparing poultry for consumption, especially in household settings, are likely to be risk factors.

NATIONAL DISEASE REPORTS*

RICIN, POWDER (PENNSYLVANIA, WASHINGTON, DC): 21 March 2014, A Hatboro [Pennsylvania] man was arrested Wednesday night [19 Mar 2014] for allegedly sending a scratch-and-sniff birthday card laced with ricin to a man now dating his ex-girlfriend, authorities said. The 19-year-old was charged with attempted murder and risking catastrophe after lab tests allegedly showed that the card he placed in the man's family mailbox on [6 Mar 2014] was discovered this week [week of 17 Mar 2014] to have contained traces of the toxic substance, Bucks County District Attorney David Heckler said. The form of the substance was unclear. The Centers for Disease Control and Prevention [CDC] says ricin can be distributed as a powder, mist, pellet, or dissolved in water. Heckler stressed that the toxin was "very potent" and that the arrestee "hit the jackpot." "He made ricin," Heckler said, "and if you lick that card, you're dead." The arrested man had bragged of the toxic card to a coworker at Target in Warrington on [6 Mar 2014], according to a probable cause affidavit. The coworker then notified police, the affidavit says, and police called the man's home and spoke to his mother, asking whether she had retrieved the mail that day. The mother, who, like her son, was not identified, told police that her daughter was outside retrieving the mail at that moment, according to the affidavit. Police advised them to return the mail to the mailbox, and authorities then came to the home to retrieve the card. Initial tests did not indicate that the card contained ricin, according to Heckler. When the arrested man was first questioned about the incident, on [7 Mar 2014], he told police that he had only coated the card with sodium hydroxide, the affidavit says, which he chose because it resembled the toxin anthrax. The perpetrator also admitted to sending threatening messages to the man via Facebook, according to the affidavit, and police seized from him (the perpetrator) what appeared to be sodium hydroxide and a notebook with a ricin recipe after questioning. The arrested man was charged on [7 Mar 2014] with terroristic threats and harassment. In the meantime, Heckler said, authorities sent the card away for subsequent lab tests. The results, returned to the District Attorney's Office on Tuesday [18 Mar 2014], confirmed that the card had traces of ricin, according to Heckler. The dose on the card was not in a powder form that could spread, Heckler said, and there were no indications that anyone had been harmed by it. But Heckler added, "If properly deployed, the stuff he put in that envelope would have killed a whole bunch of people." The Warminster Police Department subsequently led numerous agencies in arresting the 19-year-old on Wednesday night [19 Mar 2014] at his Hatboro apartment, Heckler said. Other agencies included Hatboro police, SWAT and Hazmat teams, and the FBI. Heckler said those teams were deployed in case the perpetrator had more ricin, a poison that, according to the CDC, is found naturally in castor beans. It can be made by heating the waste material that results from processing the beans, the agency says, and ingestion can lead to death. There is no antidote, the CDC says. The arrested man could not be reached for comment. He was arraigned about 8 p.m. in front of Judge Charles W. Baum, according to Assistant District Attorney Antonetta Stancu, and was being held in Bucks County Prison without bail. (Ricin is listed in Category A on the CDC List of Critical Biological Agents)

RICIN, POWDER (WASHINGTON, DC): 19 March 2014, Officials at Georgetown University [in Washington DC] say a substance in a dorm room has tested positive for ricin. University Chief of Police Jay Gruber said in an email Wednesday [19 Mar 2014] that no one has reported any symptoms of ricin exposure since the possibility of ricin was reported Tuesday [18 Mar 2014] in McCarthy Hall. Gruber said swabs were collected from the dorm room and analysis of those sample swabs did not show any biological threat agents. The chief said the room was decontaminated and all areas of McCarthy Hall have reopened to students. He said there were no immediate threats to members of the Georgetown community.

Statement from Georgetown University Chief of Police Jay Gruber:

Early Tuesday morning [18 Mar 2014], the Georgetown University Police Department was made aware that a student reported having ricin in that student's room in McCarthy Hall. Local and federal authorities were notified and began investigations. The reported substance was recovered from the room and tested positive for ricin. Additionally, swabs were collected by DC Fire and EMS and the FBI in the student's room throughout the day on Tuesday, and all analysis of those sample swabs was negative for any biological threat agents. We are now able to reoccupy all areas of McCarthy Hall.

There is no immediate threat to members of the Georgetown community. In an abundance of caution, the university secured contractors who specialize in decontamination of biological threat agents to clean the room under investigation where the contained substance was recovered. In addition, the university consulted with the DC Department of Public Health, which informed us that anyone exposed to ricin would have presented with severe symptoms within 24 hours. This window has passed and there are no reports consistent with ricin exposure. I would also like to thank all members of our community, especially the residents of McCarthy Hall, for their patience and cooperation. (Ricin is listed in Category A on the CDC List of Critical Biological Agents)

INTERNATIONAL DISEASE REPORTS*

EBOLA VIRUS DISEASE (GUINEA): 22 March 2014, We have investigated 12 samples (7 clinical cases and 5 contacts) from Guinea for suspected viral hemorrhagic fever. We have detected Ebola virus among 6 samples (from clinical cases) using RT-PCR assays and viral isolation is in progress. We are currently analyzing the sequences of different amplified viral fragments to further characterize the strain involved. Sequencing of a part of the L gene has already showed strong homology to Zaire Ebolavirus, suggesting that this species is responsible for the outbreak. This is consistent with the dramatic mortality observed. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

EBOLA VIRUS DISEASE (SIERRA LEONE): 22 March 2014, An outbreak of hemorrhagic fever that has killed 29 people in Guinea may have spread across the border into neighboring Sierra Leone, according to a World Health Organisation (WHO) document and a senior Sierra Leone health official. Guinean health officials have registered 49 [now 80] cases of infection in 3 southeastern towns and the capital Conakry since the outbreak was first reported on 9 Feb 2014. While the exact type of the fever, which is characterized by bleeding, has yet to be identified, a senior official in Guinea said on Friday preliminary tests had narrowed down the possibilities to Ebola or Marburg Hemorrhagic Fever. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

VIRAL HEMORRHAGIC FEVER (CANADA): 24 March 2014, A man who recently travelled to Western Africa is in critical condition in hospital in Saskatoon, according to provincial health officials. The nature of the illness was not released, but the man has a high fever, in addition to other symptoms. Officials say a diagnosis has not been confirmed. Saskatchewan's deputy medical health officer Dr. Denise Werker said on Monday [24 Mar 2014] that the patient -- who had visited Liberia -- was being examined for a suspected case of viral hemorrhagic fever. "Viral hemorrhagic fever is a generic name for a number of rather exotic diseases that are found in Africa," Werker said, noting one of the fevers could be Ebola. Ebola was 1st reported in 1976 in Congo and is named for the river where it was recognized. Ebola outbreaks were reported in Congo and Uganda in 2012. The virus can be transmitted through direct contact with the blood or secretions of an infected person or objects that have been contaminated with infected secretions. The illness was serious enough that officials wanted people to know about steps that have been taken. "Measures have been taken to isolate the patient to ensure the illness is not transmitted," officials said. "Public health officials believe the risk to the public is low and are investigating." According to Werker, depending on the nature of the disease, the people most at risk are health-care workers tending to the patient who do not wear protective clothing. Werker acknowledged that an outbreak of Ebola hemorrhagic fever has been identified in Guinea, Africa and may have spread to Liberia. Werker would not say which hospital in Saskatoon the patient is at in order to protect the man's privacy. He was doing work in Africa, although Werker did not know how long he had been there. She added that people who may have come into contact with the man's body fluids, such as urine or saliva, have been asked to self-isolate and monitor their health and watch for any signs of fever. Health-care workers are wearing goggles, masks, gowns, gloves and boots when around the patient. Werker said officials believe the man was not ill at the time he travelled, noting that a 3-week incubation period is normal for 2 of the suspected diseases. He fell ill after arriving in Canada. "For the most part, people are not very infectious or contagious in the incubation period," she explained. "This is when their body is becoming ill." Werker said the course of treatment will depend on identifying the fever involved and said that a preliminary finding could be available on Tuesday [25 Mar 2014]. Werker was notified about the case late Sunday [23 Mar 2014] night and has reported it to national authorities. "There is no risk to the general public," she repeated, when asked about the danger of Ebola. "We recognize that there is going to be a fair amount of concern, and that is why we wanted to go public with this as soon as possible." (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmdh.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: <http://dhmdh.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable